

## CLAIMS

What is claimed is:

- 1 1. A method for processing data received from a communications channel  
2 comprising the computer-implemented steps of:  
3 receiving, from the communications channel, received data that is based upon  
4 both modulated data and distortion introduced by the communications  
5 channel, wherein the modulated data is the result of original data  
6 modulated onto one or more carriers;  
7 generating sampled data by sampling the received data at a specified rate that  
8 satisfies specified sampling criteria;  
9 generating a filtered observation sequence by processing the sampled data;  
10 generating estimated modulated data by processing the filtered observation  
11 sequence using a recursive filter; and  
12 recovering an estimate of the original data by demodulating the estimated  
13 modulated data.